

REMARKS

Claim 22 has been cancelled. Applicants reserve the right to pursue the subject matter of this claim in a continuation application. Furthermore, claims 5, 11 and 21 have been amended to remove language objected to by the Patent Office. Also, the element “alligator clip” has been removed from claims 5 and 11. The Applicant submits that this element was not made a point of argument for patentability and believes that removal and, henceforth, broadening the respective claims will not affect determination of patentability. The amendments made herein are proper as they do not add new matter.

In efforts to obtain allowance of the pending claims, Applicant wishes to stress to the Patent Office their right and ability “to recite features of the invention either structurally or functionally.” *In re Schreiber*, 44 USPQ2d 1429, 1432 (Fed. Cir. 1997) (citing *In re Swinehart*, 169 USPQ 226, 228 (CCPA 1971)). Furthermore, giving functional claim limitations patentable weight is stressed in *Ex parte Bylund*, 217 U.S.P.Q. 492, 498 (PTO Bd. of App. 1981), where the Patent Office Board of Appeals states: “Although we have sustained several of the Examiner’s rejections we here wish to specifically note that contrary to the Examiner’s assertions, functional language in the claims must be given full weight and may not be disregarded in evaluating the patentability of the subject matter defined employing such functional language” (emphasis added). The Patent Office’s Response to Arguments section in the present office action suggests that there has been no patentable weight given to the functional limitation “spray nozzle delivering a fine evaporative cooling mist” (applies to claims 5, 7-12, and 15-17), and “delivering fluid as a continuous evaporative mist” (applies to claims 18-21). In response to the assertion that the “specification fail[s] to teach what constitutes ‘small enough,’” Applicants point out that “small enough” is supported by the specification, which describes a nozzle, which inherently has an aperture, and discloses that invention as one that produces a fine evaporative mist. Even with a specific size disclosed, the specification clearly describes to one of ordinary skill the type of nozzle and size of aperture required – one that is of a size that produces an evaporative mist.

To further point out the Patent Office’s disregard to functional limitations, the Patent Office also responds on Page 8 of the present Office Action, “Cushing discloses a spray (inherent

in a sprayer). The term 'fine' is a relative term and is considered to be met by Cushing."

Applicants do not disagree that the term "fine" is a relative term, but do disagree that Cushing discloses a sprayer that produces an evaporative mist. See above paragraph.

The Patent Office also responds on Page 8 of the present Office Action that the phrase "for generating an evaporative mist, useful for evaporatively cooling an individual" has been given no patentable weight and that, additionally, Cushing discloses such use in column 1, line 15. First of all, the Patent Office's argument is basic bootstrapping, attempting to disregard permissible functional limitations by asserting that all such limitations are just intended use. There is permissible functional language in the preamble, "An apparatus for generating an evaporative mist," and throughout the pending claims, "spray nozzle delivering a fine evaporative cooling mist" (applies to claims 5, 7-12, and 15-17), and "delivering fluid as a continuous evaporative mist" (applies to claims 18-21). These functional limitations should be given their appropriate patentable weight. See *Ex parte Bylund*, 217 U.S.P.Q. 498. Secondly, the Patent Office is incorrect in their statement that Cushing discloses "generating an evaporative mist, useful for evaporatively cooling an individual." Col 1, line 15 discusses pouring contained liquid over the rider, "water . . . may be . . . poured over the rider's body to effect cooling." This hardly discloses a device generating an evaporative mist.

The Applicant respectfully requests the Patent Office to grant the functional limitations, as discussed above, the patentable weight they deserve and the Applicant believes that, upon doing so, the prior art based rejections will prove to be moot.

Drawings

The drawings remain objected to under 37 CFR 1.83(a) for not showing the "aperture" recited in claim 21. This objection should be withdrawn because one of ordinary skill would know that an aperture is inherent in Fig. 1 by seeing that an evaporative mist is emitted from spray nozzle 10. In spite of this, the Applicants, in an effort to move the application towards allowance, have amended the drawings by adding Fig. 3, which is a side elevation view of spray nozzle 10. Fig. 3 shows an aperture 30.

Additionally, the Patent Office objected under 37 CFR 1.83(a) to the “means for pressurizing the container removably mounted to said inlet of said container” feature of claim 11 in the previous Office Action (Paper No. 26). Although no specific mention was made in the current Office Action, the Applicants have amended Fig. 2 to show the outline of the fluid tank 1 when it is connected to the pump apparatus 200 via the threaded cap 20. The complementary threading allows the pump apparatus 200 to be removably connected. This is supported by the specification as the connection is described in the last paragraph on page 3.

In light of the amended drawings and the arguments above, the drawings are in proper form and this rejection should be withdrawn.

Rejections Under 35 USC § 112

The rejection of claim 21 under 35 USC 112, first paragraph should be withdrawn. Contrary to the Patent Office, the specification does fully support each of the limitations that served as the basis for this rejection.

The limitation “an aperture size small enough to emit fluid particles having a size characteristic of an evaporative mist” of claim 21 is fully supported by the specification. Applicant points out that his invention is directed to a device that “delivers a fine mist spray to cool a localized area by evaporative cooling.” See second paragraph of page 1. Furthermore, the last paragraph of page 4 describes a “misting apparatus adapted to deliver a spray of fluid and evaporatively cool . . . a localized area.” Although a specific size of the aperture is not described in the specification, a size small enough to emit fluid particles having a size characteristic of an evaporative mist is inherently described, otherwise the evaporative mist would not be emitted. MPEP §2163.07(a) supports Applicant’s inherency position by stating that:

By disclosing in a patent application a device that inherently performs a function or has a property, operates according to a theory or has an advantage, a patent application necessarily discloses that function, theory or advantage, even though it says nothing explicit concerning it.”

Applicant’s disclosed portable mist cooling device operates on the theory, or has the advantage, of evaporatively cooling an area by spraying a fine mist. Part of that inherent disclosure is an

aperture size small enough to produce such a mist. One of ordinary skill would understand that such a size is inherent for the disclosed spray nozzle. Furthermore, the Patent Office has not established a *prima facie* case, since the Patent Office “has the initial burden of presenting evidence or reasons why persons skilled in the art would not recognize in appellant’s specification disclosure a description of the invention defined by the claims.” *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976). Since the written description requirement under section 112, first paragraph, can be either literal or inherent, Applicant concludes that the only reasoning presented which one can discern is an example of *ipse dixit* reasoning, resting on a bare assertion by the Patent Office.

Accordingly, the limitations that are the basis for the 112, first paragraph rejections are fully supported by the specification and this rejection should be withdrawn. In the alternative, Applicant submits that the Patent Office has failed to make out its *prima facie* case of lack of written description.

Rejections Under 35 USC § 102

The rejection of claims 18, 19 and 21 under 35 USC 102(b) over Cushing (US Pat. No. 4,911,339) should be withdrawn because Cushing fails to disclose all the claimed elements of these claims.

In particular, Cushing fails to the element “a means for delivering fluid as a continuous evaporative mist.” (emphasis added). Cushing discloses a bicycle water pump for delivering water to a cyclist for drinking without mounting off of the bicycle and not a portable evaporatively cooling device. The Patent Office points to structure 20 as disclosing a means for delivering fluid, but this structure is a nozzle for delivering “a stream of liquid from the container, toward the rider’s mouth.” Col. 2, ln 15-16 of Cushing. The Patent Office appears to have impermissibly ignored the limitation “delivering fluid as a continuous evaporative mist” because Cushing fails to disclose such means of delivering either explicitly or inherently. Any argument that the nozzle in Cushing inherently possesses the ability to produce a continuous evaporative mist is completely erroneous because that would be contrary to the purpose of the invention in Cushing – to deliver fluid for drinking.

Furthermore, claim 19 differs from Cushing in the limitation “means for hands-free directing of the means for delivering fluid as a continuous evaporative mist . . .” This structural limitation is not disclosed in Cushing, which discloses a bicycle pump that requires constant depression of a valve to deliver fluid to a cyclist. On the other hand, the present invention only requires an initial activation of a valve and the spray mist is delivered without the need of further manipulation of the device. Also, amended claim 21 further differs from Cushing in the limitation “aperture size small enough to emit fluid as particles having a size characteristic of an evaporative mist.” Cushing fails to disclose this limitation and, in fact, teaches away from this limitation because Cushing requires a stream of water for drinking, which requires a larger aperture size than that required to produce an evaporative mist.

Accordingly, Cushing fails to disclose all the limitations of claims 18, 19 and 21 and, therefore, the anticipation rejection based on Cushing should be withdrawn.

Rejections Under 35 USC § 103

The rejection of claims 5, 7-12, 15-17, and 20 under 35 USC 103(a) over Cushing in view of a combination of the following: Rosenberg (US Pat. No. 4,960,419), Shurnick et al. (US Pat. No. 4,852,781), Norman (US Pat. No. 842,689), and Roueche et al. (US Pat. No. 5,186,391) should be withdrawn. The references, alone or in combination, fail to teach the claimed invention, and further, the combination of the references is improper because of a lack of motivation to combine. In addition, the Applicant submits the accompanying Declaration of Steve Utter to rebut the Patent Office’s prima facie case of obviousness, which provides evidence of commercial success of a product, Misty Mate’s personal portable misting device, based on the patentable features of the product.

Applicant rebuts the obviousness rejection based on evidence of commercial success as supported by the accompanying Utter Declaration. The Utter Declaration provides evidence of commercial success and that that success is attributable to the claimed invention of the above-identified application. The Utter Declaration establishes that Misty Mate’s personal portable misting device established a new market, the personal cooling device market, including the personal portable misting device market. Upon introduction, Misty Mate enjoyed 100% of the

market for personal cooling devices. After competition from Arizona Mist, Misty Mate's market share in the personal portable misting devices slightly decreased to a current level of 95%; whereas in the broader market for personal cooling devices, competition from products like Squeeze Breeze (modified spray bottle with fan) and cool neck wraps, including Sharper Image products, caused Misty Mate's market share decreased to a level of 18% currently. The declaration also points out that the main feature of the Misty Mate device is "the production of the fine evaporative mist . . ." See paragraph 7 of Utter Declaration. Furthermore, the commercial success was not attributable to marketing or advertising. Paragraph 11 of the Utter Declaration details that at the height of advertising expenditure the percentage of sales allocated towards advertising only amounted to about 4.3% and despite subsequent large reductions in advertising expenses, sales did not significantly drop until 2001, which is about the time a variety of competitors entered the broader market for personal cooling devices. Finally, the combination of Misty Mate's revenue generated, market share and described close nexus to the claimed invention, along with the introduction of various competitors entering the market created by Misty Mate's personal portable misting devices, shows commercial success that is contrary to the Patent Office's assertion of obviousness in light of the cited prior art.

The obviousness rejection is improper and should be withdrawn because the primary reference Cushing fails to teach all that is asserted by the Patent Office, in particular the element of the claimed invention, "spray nozzle delivering a fine evaporative cooling mist." As expressed above in the section discussing the 102 based rejection, Cushing does not teach an apparatus for emitting an evaporative mist spray for evaporative cooling. Therefore, any combination requiring Cushing (which is required for all the 103 rejections) fails to teach all claim limitations and does not render the cited claims obvious.

Even beyond the limitation in the primary reference, the combination of Cushing in view of Rosenberg is an improper combination and should not support an obviousness rejection. The combination is improper because there is a lack of motivation to combine Cushing with Rosenberg. In a previous response, Applicant pointed out that the Patent Office's claimed motivation was the following, "Rosenberg discloses, in column 6, lines 3-6, a conventional alligator clip 235 for securing a tube to a convenient point." In response, on page 9 of the

current Office Action, the Patent Office again fails to provide a motivation or suggestion to combine the references, only pointing out that both references disclose different types of clips and making the conclusory statement, "One of ordinary skill in the art would have recognized that an alligator clip does not require any installation tool and therefore makes for easy attachment of the nozzle in the device of Cushing." In no conceivable manner does this suggest any motivation to combine Rosenberg with Cushing. Rosenberg discloses a modified surgical knife that provides a feature for suctioning or removing fluid and fumes and fails to disclose anything to suggest combination with a bicycle water pump for delivering fluid. The Patent Office has failed to establish a *prima facie* case of obviousness for one of the three basic criteria set out in MPEP section 2143, the motivation to combine, is absent.

Furthermore, these two references are in two completely nonanalogous art: Cushing in the art of water delivery and Rosenberg in the art of surgical devices. MPEP section 2141.01(a), in the section titled "To Rely on a Reference under 35 USC 103, it must be Analogous Prior Art," it states that "'In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which inventor was concerned.' *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992)." Rosenberg is neither in the field of water delivery nor reasonably pertinent to the problem of water delivery for cooling an individual; therefore, Rosenberg is improper prior art for making an obviousness rejection. Contrary to the Patent Office's claim that Cushing and Rosenberg both relate to the particular problem of clamps/clips, Cushing relates to the problem of portable fluid delivery for drinking, whereas Rosenberg relates to the problem of suctioning fluid and fumes during surgery.

Accordingly, based on at least one of the reasons above, the rejection of claims 5, 7-12, 15-17, and 20 is improper and should be withdrawn.

Reference to European Counterpart Application

Applicant is aware that the US Patent Office is not bound by the decisions made by foreign patent offices, but would like to point out the success in the European Patent Office of European Application No. 95 937 385.3-2425 as evidence of the patentability of the present

claimed invention. A copy of the Notice of Grant, including the pending claims is provided herewith as Exhibit A. Independent claim 1 of the European application is similar to, and broader in scope in some aspects, to claim 5 of the present application.

Applicant respectfully requests the Patent Office to consider this evidence in assessing the patentability of the pending claims.

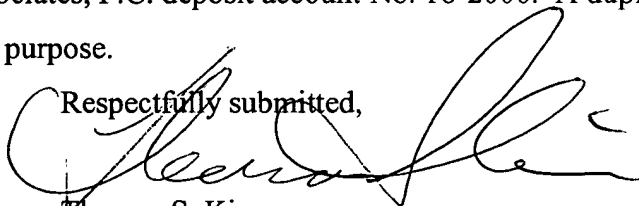
CONCLUSION

Based on the arguments, amended drawings, and the accompanying Steve Utter Declaration and Exhibit A, the Applicant submits that all pending claims, claims 5, 7-12 and 15-21, are in condition for allowance. The Applicant respectfully requests that all pending claims be allowed.

Should the Examiner require any further information or wish to discuss any aspect of this Response, the Examiner is encouraged to telephone the undersigned at the telephone number set forth below.

No fee is believed to be due. Should any fee be deemed necessary, however, the Commissioner is hereby authorized to charge any additional fees that may be required, or credit any overpayment, to Rosenbaum & Associates, P.C. deposit account No. 18-2000. A duplicate copy of this Request is enclosed for that purpose.

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES

In the claims:

Please cancel claim 22.

Please amend claims 5, 11 and 21 as follows.

5. (Amended) A misting apparatus for cooling a local area in the vicinity of a person by evaporative cooling, comprising:

a pressurizable container for supplying water, said container having a water outlet and an inlet for filling said container, and said container including a first water conduit within said container for supplying water to the water outlet;

means for pressurizing the container;

a second water conduit connected to said first water conduit, said second water conduit having a distal end;

a spray nozzle secured to the distal end of the second water conduit and in fluid communication with said second water conduit, said spray nozzle delivering an [fine] evaporative cooling mist of water in the vicinity of a person for cooling the person when pressurized water is supplied to said spray nozzle;

[an alligator clip secured to said second water conduit for attaching said second water conduit to an article of clothing of the person, whereby said spray nozzle may be positioned for providing said cooling mist of water in the vicinity of the person for hands-free operation of the misting apparatus;] and

a restrictive valve having a closed position and an open position, said valve connected to said second water conduit for controlling flow of water to said spray nozzle, whereby pressurization of said pressurizable container forces an uninterrupted spray of water from said pressurizable container out through said spray nozzle on said second conduit when said restrictive valve is in said open position.

11. (Amended) A system for cooling a person, the system comprising:
a pressurizable container for supplying water having a water outlet and an inlet for filling said container;
a first water conduit for fluidly communicating water within said container to said water outlet;
means for pressurizing the container removably mounted to said inlet of said container to create a seal with said container;
I2 a second water conduit extending from said water outlet, said second water conduit having a distal end and a proximal end, said proximal end connected to said container;
at least one spray nozzle secured to the distal end of the second water conduit and in fluid communication therewith, said spray nozzle delivering an [fine] evaporative cooling mist of water in the vicinity of a person when pressurized water is communicated to the spray nozzle;
means for securing the container to the person; and
[an alligator clip secured to said second water conduit for attaching said second water conduit to an article of clothing of the person, whereby said spray nozzle may be positioned for providing said cooling mist of water in the vicinity of the person for hands-free operation of the misting apparatus; and]
a valve having a closed position and an open position, said valve for controlling flow of water through said second water conduit and connected to said second water conduit between said container and said spray nozzle, whereby pressurization of said pressurizable container forces an uninterrupted spray of water from said pressurizable container out through said spray nozzle on said second conduit when said restrictive valve is in said open position.

21. (Amended) The apparatus for generating an evaporative mist according to claim 18, wherein the means for delivering fluid as a continuous evaporative mist comprises a[n] nozzle having an aperture [size small enough to emit fluid as particles having a size characteristic of an evaporative mist].
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In the Drawings:

Please amend Figs. 1 and 2 as shown in new Figs. 1 and 2, provided herewith, the amendment shown in red ink.

Please add new Fig. 3 as shown in red ink on the accompanying Amended Figures.

In the Specification:

Please add the following paragraph in the "Brief description of the figures" section after the second paragraph and before the "Description of the preferred embodiments of the invention" section on page 3 of the specification.

Figure 3 is a side elevation view of the spray nozzle.

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FIG. 1

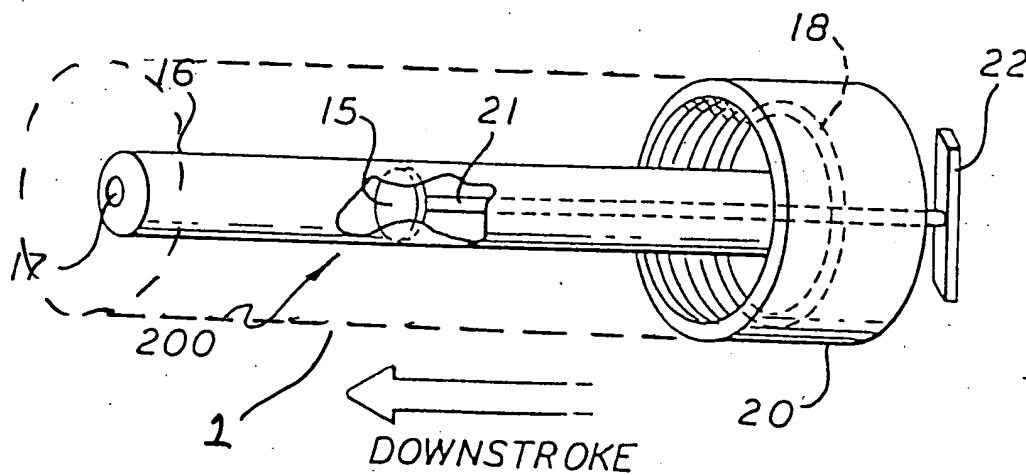
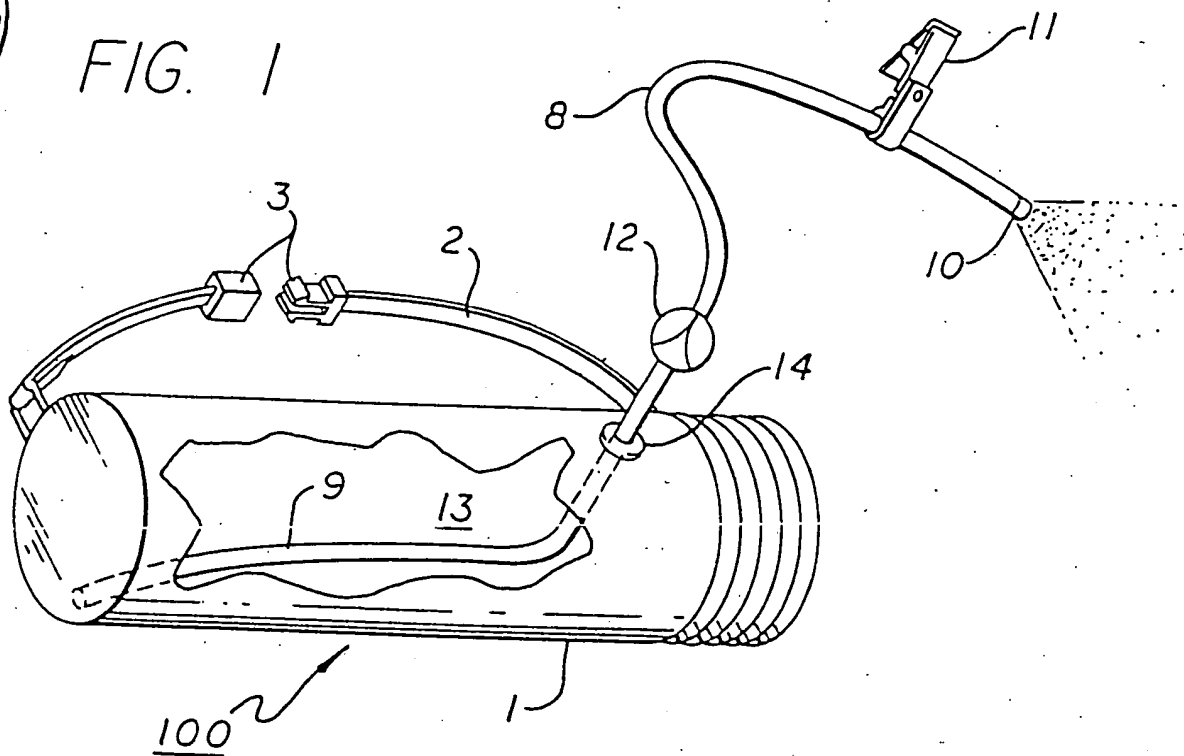


FIG. 2

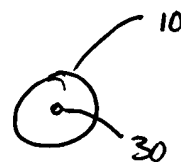


Fig. 3